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NBS Special Publication 708

Standard Reference Data Publications 1964-1984

Joan C. Sauerwein and Geraldine R. Dalton

National Bureau of Standards

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[1] Headquarters and Laboratories at Gaithersburg, MD, unless otherwise noted; mailing address Gaithersburg, MD 20899.

[2] Some divisions within the center are located at Boulder, CO 80303.

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Foreword

The National Standard Reference Data System was established in 1963 for the purpose of promoting the critical evaluation and dissemination of numerical data of the physical sciences. The program is coordinated by the Office of Standard Reference Data of the National Bureau of Standards but involves the efforts of many groups in universities, government laboratories, and private industry. The primary aim of the program is to provide compilations of critically evaluated physical and chemical property data. These tables are published in the Journal of Physical and Chemical Reference Data, in the NSRDS-NBS series of the National Bureau of Standards, and through other appropriate channels. Other outputs of the program include bibliographies, computer programs for handling data, and databases in magnetic tape format.

This listing includes all publications which have appeared since establishment of this program in 1964. Indexes to authors, properties, and material classes are given, as well as information on ordering publications.

David R. Lide, Director
Office of Standard Reference Data

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Standard Reference Data Publications
1964 - 1984

Joan C. Sauerwein and Geraldine R. Dalton

Office of Standard Reference Data, National Bureau of Standards, Gaithersburg, MD 20899

The National Bureau of Standards' Office of Standard Reference Data manages a network of data centers that prepare evaluated data bases of physical and chemical properties of substances. Data bases are available in printed form, on magnetic tapes and through on-line computer networks. This document provides a comprehensive list of the products available from the National Standard Reference Data System (NSRDS) for the years 1964-1984, including indexes qualified by author, material, and property terms. Ordering information and current prices can be found at the end of this document.

Key words: bibliographies; chemical properties; evaluated data; indexes; materials properties; physical properties; publication list.

1. Introduction

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This publications list includes NSRDS data compilations, critical reviews, and other publications which are available from various sources. Indexes by author, property, and materials class are included. Prices and ordering instructions for publications listed are given in this document and further information may be obtained from:

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Journal of Physical and Chemical Reference Data

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		JANAF Thermochemical Tables, 3rd ed. out in late 1985
A3	19	Atomic Energy Levels Reprint Nos. 26, 54, 64, 68, 94, 100, 109, 125, 126, 131, 132, 149, 150, 154, 156, 160, 179, 180 and 192
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See: Energy bands of solids

Band spectra

See: Electronic molecular spectra

Binding energy

See: Atomic energy levels and spectra
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Boiling point

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Bulk modulus

See: Elastic constants

Cell constants

See: Lattice constants

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See: Thermodynamic properties
Heat of combustion

Compressibility factor

See: Equation of state

Compton scattering cross section

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See: Electrical conductance

Conductivity, electrical

See: Electrical resistivity

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See: Thermal conductivity

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See: Charge exchange cross section
Electron collision cross section
Photon cross section
Rayleigh scattering cross section

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See: Electric dipole moment of molecules

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See: Energy bands of solids
Semiconductor properties

Energy levels

See: Atomic energy levels and spectra
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Energy, binding

See: Bond Dissociation energy
Bond dissociation energy
Electron affinity

Energy, dissociation

See: Bond dissociation energy
Thermodynamic properties

Enthalpy

See: Thermodynamic properties

Enthalpy of formation

See: Heat of formation
Thermodynamic properties

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See: Thermodynamic properties

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See: Electrical conductance

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See: Atomic energy levels and spectra

F-values

See: Transition probabilities for atoms and molecules

Force constants

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Formation, heat of

See: Heat of formation
Thermodynamic properties

Franck-Condon factor

See: Transition probabilities for atoms and molecules

Free energy

See: Thermodynamic properties

Frequencies, vibrational

See: Vibrational frequencies of molecules

Fundamental physical constants

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G-Factor

See: Magnetic moments of molecules

Gaseous diffusion coefficient

See: Diffusion coefficient

Gibbs energy

See: Thermodynamic properties

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Line strengths

See: Transition probabilities for atoms and molecules

Line widths

See: Spectral line widths

Loss tangent

See: Dielectric constant

Magnetic moments of molecules

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See: Electron swarm parameters

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See: Rotational spectra
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See: Electronic molecular spectra

Oscillator strengths

See: Transition probabilities for atoms and molecules

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PVT surface

See: Equation of state

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See: Electrical resistivity

Rotational constants

See: Molecular energy levels and constants

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Specific conductance

See: Electrical conductance

Specific gravity

See: Density

Specific heat

See: Heat capacity
Thermodynamic properties

Spectra

See: Atomic energy levels and spectra
Rotational spectra
Vibrational spectra (infrared, Raman)

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Structure, crystal

See: Crystal structure

Structure, molecular

See: Molecular structure

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See: Thermal conductivity

Thermal expansion coefficient

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See: enthalpy, entropy, Gibbs energy, heat capacity (see also Heat of formation, Heat capacity, and other individual properties)

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☐ Document describes a computer program; SF-185, FIPS Software Summary, is attached.

11. ABSTRACT (*A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here*)

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12. KEY WORDS (*Six to twelve entries; alphabetical order; capitalize only proper names; and separate key words by semicolons*)

bibliographies; chemical properties; evaluated data; indexes; materials properties; physical properties; publication list

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